

**WHAT IS CLAIMED IS:**

1. A method for managing returnable containers in a manufacturer's supply chain comprising:
  - creating at least one container inventory holding area in said manufacturer's supply chain;
  - storing at said container inventory holding area a plurality of containers suitable for use by a plurality of suppliers in said manufacturer's supply chain;
  - calculating a container allocation quantity for each of said plurality of suppliers;
  - determining a supplier on-hand container inventory quantity for each of said plurality of suppliers;
  - determining for each of said plurality of suppliers an actual container quantity based on said container allocation quantity and said supplier on-hand container inventory quantity for each of said suppliers; and
  - shipping from said container inventory holding area to each of said plurality of suppliers said actual container quantity.
2. The method of claim 1 wherein determining said container allocation quantity comprises:
  - determining for each of said plurality of suppliers a standard allocated days value;
  - determining for each of said plurality of suppliers a parts demand value; and
  - multiplying said standard allocated days value by said parts demand value for each of said plurality of suppliers.

3. The method of claim 2 wherein determining for each of said plurality of suppliers a standard allocated days value comprises determining a process flow of containers for each of said plurality of suppliers.
4. The method of claim 1 further comprising adjusting said actual container quantity for one of said plurality of suppliers based on a request from said supplier.
5. The method of claim 1 wherein said supplier on-hand container inventory quantity comprises empty containers at said supplier's facility and full containers waiting to ship.
6. The method of claim 5 wherein said supplier on-hand inventory container quantity further comprises empty containers in-transit to said supplier's facility and full containers in-transit to said manufacturer's facility.
7. The method of claim 1 wherein said inventory holding area is of the type returnable container center.
8. A returnable container management system comprising:
  - a container inventory holding area;
  - a plurality of containers at said container inventory area, said containers suitable for use by a plurality of suppliers in said manufacturer's supply chain;
  - a container allocation quantity for each of said plurality of suppliers;
  - a supplier on-hand container inventory quantity for each of said plurality of suppliers;
  - an actual container quantity based on said container allocation quantity and said supplier on-hand container inventory quantity for each of said suppliers; and
  - a means for shipping from said container inventory holding area to each of

said plurality of suppliers said actual container quantity.

9. The system of claim 8 wherein determining said container allocation quantity comprises:

determining for each of said plurality of suppliers a standard allocated days value;

determining for each of said plurality of suppliers a parts demand value; and

multiplying said standard allocated days value by said parts demand value for each of said plurality of suppliers.

10. The system of claim 9 wherein determining for each of said plurality of suppliers a standard allocated days value comprises determining a process flow of containers for each of said plurality of suppliers.

11. The system of claim 8 further comprising adjusting said actual container quantity for one of said plurality of suppliers based on a request from said supplier.

12. The system of claim 8 wherein said supplier on-hand container inventory quantity comprises empty containers at said supplier's facility and full containers waiting to ship.

13. The system of claim 12 wherein said supplier on-hand inventory container quantity further comprises empty containers in-transit to said supplier's facility and full containers in-transit to said manufacturer's facility.

14. The system of claim 8 wherein said inventory holding area is of the type returnable container center.

15. A method for managing returnable containers in a manufacturer's supply chain comprising:

identifying a plurality of inventory holding areas;

determining a plurality of process flows wherein each process flow represents a transfer of containers from a first one of said plurality of inventory holding areas to a second one of said plurality of inventory holding areas;

assigning at least one container type to each of said plurality of process flows;

determining an allocation quantity of containers for each supplier in said manufacturer's supply chain, said allocation quantity determined according to said process flows;

determining an inventory of containers at each of said inventory holding areas; and

transferring said inventory of containers at each of said inventory holding areas according to said process flows to provide to each of said suppliers a quantity of containers equal to said allocation quantity for said container type assigned to said process flow.

16. The method of claim 15 wherein determining said allocation quantity of containers comprises:

determining for each of said plurality of suppliers a standard allocated days value;

determining for each of said plurality of suppliers a parts demand value; and

multiplying said standard allocated days value by said parts demand value for each of said plurality of suppliers.

17. The method of claim 15 wherein said plurality of inventory holding areas is selected

from the group of inventory holding area types consisting of supplier on-hand, supplier in-transit full, supplier in-transit empty, consolidation center, manufacturer's facility, and returnable container center.

18. The method of claim 17 wherein transferring said inventory of containers at each of said inventory holding areas comprises shipping said inventory of containers from a returnable container center inventory holding area to a supplier in-transit empty inventory holding area.
19. The method of claim 15 further comprising allocating a safety stock quantity of containers to each supplier.
20. The method of claim 15 further comprising modifying said allocation quantity of containers for each of said suppliers according to changes in said manufacturer's production schedule.